

**3GPP TSG CN Plenary Meeting #12**  
**Stockholm, Sweden, 13<sup>th</sup> - 15<sup>th</sup> June 2001**

**Tdoc NP-010333**

**Source:** CN5  
**Title:** Rel4 CR to OSA; API; Part 2: Common Data Definitions (29.198-2)  
**Agenda item:** 8.5 OSA enhancements [OSA1]  
**Document for:** APPROVAL

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Introduction of TpOctet

Doc-1st-Level	Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Meeting-2nd-Level	Workitem
NP-010333	N5-010304	29.198-2	002		Rel4	Introduction of TpOctet	F	4.0.0	4.1.0	N5-11	OSA1

## CHANGE REQUEST

⌘ 29.198-2 CR 002 ⌘ rev - ⌘ Current version: 4.0.0 ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Introduction of TpOctet		
<b>Source:</b>	⌘ CN5		
<b>Work item code:</b>	⌘ OSA	<b>Date:</b>	⌘ 24/05/2001
<b>Category:</b>	⌘ F	<b>Release:</b>	⌘ Rel4
<i>Use <u>one</u> of the following categories:</i>		<i>Use <u>one</u> of the following releases:</i>	
F (essential correction)		2 (GSM Phase 2)	
A (corresponds to a correction in an earlier release)		R96 (Release 1996)	
B (Addition of feature),		R97 (Release 1997)	
C (Functional modification of feature)		R98 (Release 1998)	
D (Editorial modification)		R99 (Release 1999)	
Detailed explanations of the above categories can be found in 3GPP TR 21.900.		REL-4 (Release 4)	
		REL-5 (Release 5)	

<b>Reason for change:</b>	⌘ In order to make sure that some data is sent over the “distributed wire” untouched a new data type is needed.
<b>Summary of change:</b>	⌘
<b>Consequences if not approved:</b>	⌘ Data that is to be sent un-translated over e.g. CORBA might be translated due to different encodings in different platforms.

<b>Clauses affected:</b>	⌘ 4.2
<b>Other specs affected:</b>	⌘ <input type="checkbox"/> Other core specifications ⌘
	<input type="checkbox"/> Test specifications
	<input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘

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## 4 Common System Data definitions

These data definitions are assumed to be provided by the client operating system.

### 4.1 Standard Data types

The APIs assume that the following Data types can be supported.

#### 5.1.1 TpBoolean

Defines a Boolean data type.

#### 5.1.2 TpInt32

Defines a signed 32-bit integer.

#### 5.1.3 TpInt32Ref

Defines a **Error! Reference source not found.** to a [TpInt32](#).

#### 5.1.4 TpFloat

Defines a single precision real number

#### 5.1.5 TpFloatRef

Defines a [Reference](#) to a [TpFloat](#)

#### 5.1.6 TpLongstring

Defines a Byte string, comprising length and data. The length shall be at least a 32-bit integer.

#### 5.1.7 TpLongstringRef

Defines a **Error! Reference source not found.** to a [TpLongstring](#).

#### 5.1.x TpOctet

Defines an 8 bit quantity that is not translated during transmission.

#### 5.1.x TpOctetRef

Defines a Reference to a TpOctet.

#### 5.1.x TpOctetSet

Defines a Numbered Set of Data elements of TpOctet.

## 5.1.8 TpString

Defines a Byte string, comprising length and data. The length shall be at least a 16-bit integer.

## 5.1.9 TpStringRef

Defines a **Error! Reference source not found.** to a TpString.

## 5.1.10 TpAssignmentID

This data type is identical to a TpInt32. It specifies a number which identifies an individual event notification enabled by the application or service.

## 5.1.11 TpAssignmentIDRef

Defines a Reference to type TpAssignmentID.

## 5.1.12 TpSessionID

Defines a network unique session ID. The API uses this ID to identify sessions, e.g. call or call leg sessions, within an object implementing an interface capable of handling multiple sessions. For the different services, the sessionIDs are unique only in the context of a service manager instantiation (e.g., within the context of one Generic Call Control manager). As such if an application creates two instances of the same service manager it shall use different instantiations of the callback objects which implement the callback interfaces.

The session ID is identical to a TpInt32 type.

## 5.1.13 TpSessionIDRef

Defines a Reference to a TpSessionID.

## 5.1.14 TpSessionIDSet

Defines a Numbered Set of Data Elements of TpSessionID.

## 5.2 Other Data sorts

The APIs assumes that the following data syntaxes can be supported

### 5.2.1 Sequence of Data Elements

This describes a sequence of data types. This may be defined as a structure (for example, in C++) or simply a sequence of data elements within a structure.

EXAMPLE: The TpAddress data type may be defined in C++ as:

```
typedef struct {
    TpAddressPlan      Plan;
    TpString           AddrString;
    TpString           Name;
    TpAddressPresentation.....Presentation;
    ....TpAddressScreening.....Screening;
    ....TpString.....SubAddressString;
```

```
    } TpAddress;
```

```
//Source file: osa.idl
```

```
//IDL file for 3GPP TS 29.198 Part 2 (Common Data) Release 4
```

```
//Date: 10th March 2001
```

```
#ifndef __OSA_DEFINED
```

```
#define __OSA_DEFINED
```

```
module org {
```

```
    module open_service_access {
```

```
        typedef boolean TpBoolean;
```

```
        typedef float TpFloat;
```

```
        typedef long TpInt32;
```

```
        typedef string TpLongString;
```

```
        typedef octet TpOctet;
```

```
        typedef sequence <TpOctet> TpOctetSet;
```

```
        typedef string TpString;
```